

**NRC COMBINED CONSTRUCTION &  
OPERATION LICENSE (COL) FOR  
NORTH ANNA NUCLEAR POWER  
PLANT  
FEDERAL CONSISTENCY REVIEW**

**Project Description**

Dominion Virginia Power is proposing to construct and operate a third nuclear unit (Unit 3) at the existing North Anna Power Station (NAPS) site in Louisa County, Virginia. The proposed project requires issuance of a Combined License from the Nuclear Regulatory Commission (NRC) pursuant to 10 CFR, Part 52, Subpart C. The COL will authorize construction of Unit 3, not including certain site preparation activities previously authorized by an NRC Early Site Permit (ESP) in 2007. The proposed project also requires the issuance of federal permits from the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Activities associated with the proposed Unit 3 project can be divided into five components:

- 1) construction of Unit 3 at the NAPS site, including site separation activities that will occur prior to the construction of

- Unit 3;
- 2) additions to the existing NAPS-to-Ladysmith transmission line;
- 3) modifications to the large component transport route (LCTR);
- 4) the placement of construction material on the Route 700 parcels near the entrance to the NAPS site; and
- 5) operation of Unit 3.

The NAPS site and Route 700 parcels are owned by Dominion and located in Louisa County. Lake Anna, which is adjacent to the NAPS site and supports operation of the existing plant, is bordered by Louisa, Spotsylvania, and Orange Counties. The transmission line corridor traverses Louisa, Spotsylvania, and Caroline Counties. The LCTR traverses King William, Caroline, Hanover, and Louisa Counties.

**The Commonwealth of Virginia's  
Review Authority**

Pursuant to the Federal Consistency provision of the Coastal Zone Management Act (CZMA) (*Section 307, 16 USC §1456*), federally licensed or permitted activities affecting coastal uses or resources must be conducted in a manner consistent with Virginia's approved Coastal Zone Management Program

(VCP). In order to be consistent with the VCP, the project must be consistent with the Enforceable Policies of the VCP (*15 CFR Part 930, Subpart D, Section 930.50*). In addition, *15 CFR section §930.58(a)(3)*, requires that applicants demonstrate adequate consideration of the advisory policies of the state's coastal program.

The Department of Environmental Quality (DEQ) is the lead agency for coordination of federal consistency reviews under the CZMA. DEQ, through the Office of Environmental Impact Review, is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. The VCP applies in Virginia localities bordering the seacoast and tidal tributaries, including Spotsylvania County, which is bounded by the North Anna River and Lake Anna.

Although part of the proposed site is not located within the geographical boundaries of Virginia's Coastal Zone, DEQ determined and Dominion has agreed that the proposed action could affect Virginia's coastal uses and resources. Accordingly, Dominion

submitted a consistency certification for the Commonwealth's review, following our review of NRC's Supplemental EIS.

**Enforceable Policies which Apply  
to NRC's COL and Corps' Permits**

***Fisheries Management***

administered by Department of Game and Inland Fisheries and Virginia Marine Resources Commission.

***Point Source Pollution Control:*** (i) Section 401 of the Clean Water Act (water quality certification), installation and operation of two surface water intakes to support construction of Unit 3 and water withdrawal for operation of Unit 3 administered through Virginia Water Protection Permit by DEQ; and (ii) Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System) administered through the Virginia Pollutant Discharge Elimination System permit by DEQ.

***Wetlands (tidal and non-tidal)***

administered by (i) DEQ through the Virginia Water Protection Permit and (ii) by VMRC and localities under the tidal wetlands legislation.

***Non-point Source Pollution Control*** administered by

Department of Conservation and Recreation.

**Coastal Lands Management** administered by Department of Conservation and Recreation.

**Air Pollution Control** administered by DEQ.

**Subaqueous Lands Management** administered by the VMRC.

### Current Review

The consistency certification for the COL currently under review contemplates the use of a closed-cycle, wet, and dry cooling method for the proposed third reactor. The intent of the review is to determine if this project, as currently proposed, is consistent with the enforceable policies of the VCP. In accordance with the Federal Consistency Regulations, the State has three options:

**1. Concur:** NRC may issue the COL. However, the NRC may still deny the COL despite the State's concurrence with the federal consistency certification.

**2. Concur with conditions:** NRC may issue the COL. As in #1, the NRC may still deny the COL despite

the State's concurrence with the federal consistency certification. Note that the State cannot, through the CZMA, enforce its conditions after it has concurred. However, the NRC may issue its COL subject to the State's conditions if the NRC agrees with the State's conditions.

**3. Object:** The NRC cannot issue its COL if the State objects.

### Background

Dominion received an ESP in November 2007 from the NRC to add two units to the NAPS. The ESP process uses a Plant Parameters Approach, which utilizes an envelope of possible reactor designs; Dominion has utilized a maximum of two reactors of up to 4500 megawatts each of rated thermal capacity. Issues resolved with finality under the ESP process, including environmental issues, are not re-examined in any subsequent licensing action by the NRC. While the ESP process does not approve a particular reactor design, nor allow the construction of the reactor, it does authorize construction of all the items identified in the site redress plan, including:

- site clearing
- foundations
- intake structures

- outfall structures.

The ESP was issued for a maximum of 20 years and allows land clearing, stream filling, and intake structure construction to proceed under the site redress plan. On November 21, 2007, DEQ provided a conditional concurrence with the federal consistency certification for the ESP.

### QUESTIONS

For general or project specific questions, please contact:

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### WEBSITES:

Federal Consistency Information:  
<http://www.deq.virginia/eir/federal/eir/federal.html>  
Major NEPA Projects:  
<http://www.deq.virginia/eir/federal/eir/majnepa.html>  
Major Consistency Projects:  
<http://www.deq.virginia/eir/majfederal.html>



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## **NUCLEAR REGULATORY COMMISSION COMBINED CONSTRUCTION AND OPERATION LICENSE (COL) FOR NORTH ANNA NUCLEAR POWER PLANT, UNIT 3 FEDERAL CONSISTENCY REVIEW**

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**Public Hearing at Louisa  
County Middle School, Held  
on March 3, 2011**

**By**

**The Department of  
Environmental Quality**